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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,129	01/31/2002	Jean Viaud	09019-US	9732

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Jimmie R. Oaks  
Patent Department  
DEERE & COMPANY  
One John Deere Place  
Moline, IL 61265-8098

EXAMINER

DUNN, DAVID R

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 08/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/060,129

Applicant(s)

VIAUD ET AL.

Examiner

David Dunn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

2. The information disclosure statement filed 1/31/02 is acknowledged. See enclosed IDS form.

### *Claim Objections*

3. Claim 3 is objected to because of the following informalities: in line 3, "firs" should -- first--. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not

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clearly describe how the suspension does not introduce "bending loads into said bearing elements". It is not clear how the invention is to be made without specifically "introducing bending loads into said bearing elements" when the bearing elements "move into positions for establishing a pivot axis that is not parallel to said horizontal transverse pivot axis".

*Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Ham, Jr. et al. (6,354,614)

Ham, Jr. et al. discloses suspension for an axle including first and second arms (arm 30, Figure 2; inherently are two, see for example, column 2, lines 50-65) respectively fixed to the axle at locations inward of the ground wheels (see for example, Figure 1); first and second coupling assemblies (38) respectively mounting the first and second arms to the frame and respectively including first and second bearing elements (bushing 38) for normally establishing a horizontal transverse pivot axis about which said first and second arms may pivot vertically but also for permitting said bearing elements to move into positions for establishing a pivot axis that is not parallel to said horizontal transverse pivot axis without introducing bending loads into said

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bearing elements (see for example, column 1, lines 43-48; column 2, lines 3-8). The arms are symmetrical about a longitudinal axis (see Figure 2).

8. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Santo et al. (5,954,350).

Santo et al. discloses suspension for an axle including first and second arms (12, 14) respectively fixed to the axle at locations inward of the ground wheels (see spindles 18, 20; Figure 2); first and second coupling assemblies (26, 28) respectively mounting the first and second arms to the frame and respectively including first and second bearing elements (50) for normally establishing a horizontal transverse pivot axis about which said first and second arms may pivot vertically but also for permitting said bearing elements to move into positions for establishing a pivot axis that is not parallel to said horizontal transverse pivot axis without introducing bending loads into said bearing elements (see Figures 4A & 4B). As seen in Figure 2, the arms are symmetrical.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 2, and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pierce et al. (6,508,482) in view of Mauck (3,807,752).

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Pierce et al. shows a suspension for an axle including first and second arms (24) fixed to the axle inward of the ground wheels (see Figures 2-4); first and second coupling assemblies (34) mounting the arms to the frame (see Figure 1) for establishing a horizontal transverse pivot axis. Pierce shows the arms being symmetrical. Pierce shows first and second cushioning elements (25) mounted between the frame and the arms. Pierce shows elements/pins (39) between the frame and arms used to limit downward movement of the axle (by shock absorber 26).

Pierce et al. does not explicitly show the bearing elements allowing a pivot axis that is not parallel to the horizontal transverse pivot axis without introducing bending loads into the bearing elements.

Mauck teaches a spherical bearing (see 47, Figure 10) used to connect a suspension arm to a frame element such that it would allow a pivot axis not parallel to the horizontal transverse pivot axis without introducing bending loads into the bearing elements.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Pierce et al. with the teachings of Mauch in order to allow increased flexibility in the suspension in order to provide a smoother ride and prevent damage to the suspension.

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pierce et al. in view of Mauch as applied to claim 1 above, and further in view of Gottschalk et al. (5,037,126).

The combination of Pierce et al. and Mauch is discussed above and fails to show an end flange that is releasably coupled the axle.

Gottschalk et al. teaches a suspension arm with a flange (78) that is releasably coupled to the axle (by 72; see Figure 5A).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Pierce et al. and Mauch with the teachings of Gottschalk in order to allow the axle to be easily removed for repair or service.

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pierce et al. in view of Mauch as applied to claim 1 above, and further in view of Matthias et al. (2,757,017).

The combination of Pierce et al. and Mauch is discussed above and fails to show a secondary axle.

Matthias et al. shows an wheel suspension with a first axle (26) and a secondary axle (42) extending in parallel relationship to the first and coupled to the coupling assemblies (51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Pierce et al. and Mauch with the teachings of Matthias et al. in order to provide increased stiffness to the frame.

### *Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. VanDenberg shows a suspension system of interest. Ferguson shows a suspension bearing of interest.

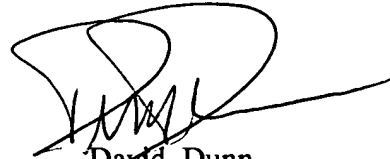
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 703-305-0049. The examiner can normally be reached on Mon-Thur, alt. Fridays, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-1113.

A handwritten signature in black ink, appearing to read 'David Dunn', with a long horizontal line extending to the right.

David Dunn

Examiner

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